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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,777	12/29/2000	Joel D. Medlock	9824-033-999	8752

38881 7590 08/05/2004

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EXAMINER
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LUGO, DAVID B

ART UNIT	PAPER NUMBER
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2637

DATE MAILED: 08/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/751,777

Applicant(s)

MEDLOCK ET AL.

Examiner

David B. Lugo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 6,17,18,26 and 28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18 and 26 is/are allowed.
- 6) ☒ Claim(s) 6,17 and 28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to the rejection(s) of claim(s) 6, 17, 18 and 26 under 35 USC § 102(e) have been fully considered and are persuasive. Therefore, the rejections have been withdrawn. However, upon further consideration, a new ground(s) of rejection of claims 6 and 17 are made in view of a newly applied prior art reference. New claim 28 is also addressed below.

### ***Drawings***

2. The drawings are objected to because Fig. 4A should be re-labeled Fig. 4. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application.

### ***Specification***

3. The disclosure is objected to because of the following informalities:

Regarding the related applications listed in page 1 and in page 14, lines 11-13, all attorney docket numbers should be replaced with corresponding application serial numbers, and if applicable, patent numbers. This requirement was made in the previous Office action but was not addressed in applicant's response.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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6. Applicant recites in step c) that a unique phase offset for the second code sequence is implemented by loading the second code sequences in the computation circuits, wherein the computation circuits are coupled in an offset manner with the memory. However, in step a), it is the first code sequence that is being stored in memory. Thus, it is unclear how a phase offset is implemented for the second code sequences by loading the second code sequences in the computation circuits, which are coupled in an offset manner with the memory, when the first code sequence is what is recited as being stored in the memory.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 6 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Fenton U.S. Patent 5,414,729.

9. Regarding claim 6, Fenton discloses a searcher device comprising a memory 250 for storing a first code sequence, a plurality of computation circuits 240 coupled to the memory for performing a correlation between the first code sequence and the second code sequence at a unique phase offset, where the computation circuits have a unique coupling offset from each other with respect to a location in which they are coupled to the memory (see Fig. 2).

10. Regarding claim 17, Fenton discloses a searcher device where a signal having a first code sequence in a memory 250 is received, an additional signal having a second code sequence is further received at a plurality of computation circuits 240, which are coupled to the memory for

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performing a correlation between the first code sequence and the second code sequence at a unique phase offset, where the computation circuits have a unique coupling offset from each other with respect to a location in which they are coupled to the memory (see Fig. 2).

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zhuang in view of Krasner U.S. Patent 6,272,430.

13. Regarding claim 28, Zhuang discloses a searcher device for PN code acquisition in Figure 1 comprising a plurality of computation circuits (correlators 1-N<sub>1</sub>) for correlating a first code sequence  $r(t)$  with a second code sequence supplied from a plurality of offset code sequence generators (PN code subsequence generators) coupled respectively to the computation circuits which generate a second code sequence at unique offsets (see pp. 995-996, section II).

14. Zhuang does not expressly show that the received signal comprising the first code sequence is stored in a memory.

15. However, it is well known in the art to store a received signal in a memory. For instance, Krasner discloses the storage of a received signal in memory 48 (Fig. 2) where the signal is subsequently processed in a processor 52, which may be in a low power state while the memory is being filled (col. 8, lines 8-10).

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16. It would have been obvious to one of ordinary skill in the art to use a memory to store the received signal while placing the processor in a low power state, as taught by Krasner, in the device of Zhuang to conserve power consumed by the processor.

***Allowable Subject Matter***

17. Claims 18 and 26 are allowed.

18. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record discloses searchers comprising computation circuits for correlating a received signal having a first code sequence with a second code sequence a plurality of phase offsets, but does not expressly disclose implementing the phase offsets by storing the second code sequence in a memory block having a variable length to provide the unique phase offset to each of the computation circuits.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **David B. Lugo** whose telephone number is **(703) 305-0954**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Jay Patel**, can be reached at **(703) 308-7728**.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
P.O. Box 1450  
Alexandria, VA 22313-1450

**or faxed to:**

**(703) 872-9306**

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

dl

7/29/04

  
KHAI TRAN  
PRIMARY EXAMINER 8/2/04